Indiana Department of Education Thursday, May 3rd STEM Council Meeting Rolls Royce Training Center 2601 Raymond Street, Indianapolis, IN 46241 2:30-4:00 pm

Draft Meeting Notes

Objectives

- Introduce the first (comprehensive) DRAFT of the Indiana STEM 6-Yr Strategic Plan
- Working session around the Strategic Plan Implementation Roadmap and Collaborators
- Update on next steps, team meetings and deliverables timeline

Welcome and Invitation to a tour of the facility after the meeting

Jennifer Watts, Assistant Director of Policy, IDOE Reginald McGregor, Manager, Engineering Employee Development, Rolls Royce

Quick Updates

Amanda McCammon, Chief of Workforce & STEM Alliances, IDOE IDOE STEM Updates

- IDOE STEM Acceleration Grants totaling \$953,249 are going to 60 schools in 11 districts, impacting 23,873 students
- o STEM Research and Evaluation Efforts (Senate Bill 172 Computer Science)
 - Computer Science Professional Development Contract
 - New Tech impacting approximately 800 teachers/year
 - \$20,000 Google Computer Science Professional Development Grant
 - STEM RFP-letter of intent submitted \$500,000 available July 1

Overview: Indiana STEM 6-yr Strategic Plan Draft

Jennifer Watts, Assistant Director of Policy, IDOE

Timeline: Why 6 years?

- o Indiana STEM Strategic Plan lays the foundation for 2019-2025
- State Fiscal Calendar starts and ends on a budgetary year (Biennium) for the State legislature
- School Calendar Plan starts with the 2018-2019 school year, but we do not foresee school district level implementation plans being deployed until the beginning of 2019.
- Setting Expectations We also know that our goals cannot be achieved in just a couple years, so we need to set the course for enough time to see significant impact. (Scooped for a timeframe that is realistic for success)

Vision and Mission

- The Strategic Plan is driven by a Vision and Mission that were developed by the STEM Council
- Vision is long term; our ideal state
- Mission is how we will accomplish our vision

Strategic Objectives with Impact Goals

- Improve STEM Instruction: 100% on Indiana K-12 teachers will be trained in STEM pedagogy by 2025.
- Scaled Evidence-based Curriculum in Classrooms: 100% of Indiana K-12 schools will implement integrated, evidence-based STEM curriculum by 2025.
- Foster Early STEM Career Exposure: 100% of Indiana's K-12 schools will create and sustain robust STEM related business and industry partnerships in order to ensure all K-12 students are postsecondary and career ready.

Theory of Action

The strategic plan is "loyal to the Theory of Action". Council members are encouraged to offer feedback on the Theory of Action.

High Level Systems Strategies

- 1. Whole of Government Coordination over the next three years is the intent of the council.
 - Department of Education: Prioritizing STEM for the Administration's education efforts.
 - Commission for Higher Education: Setting ambitious but achievable goals for Indiana's postsecondary institutions.
 - Department of Workforce Development: Investing in and better training the future STEM workforce pipeline.
- 2. Whole of Systems Approach
 - We believe that in order to fully operationalize this Strategic Plan and achieve its Impact Goals, we will have to work with stakeholders and collaborators outside of the government.
 - Examples of these actors include:
 - Philanthropic Foundations
 - Institutions of Higher Education
 - Private sector and local businesses
 - Non-profit organizations
 - Science centers
 - Afterschool programs
 - Museums

Advocacy organizations and task forces

Reminders/Requests

- Council members are urged to read the strategic plan and offer feedback and suggested edits by Friday, May 18
- We are in need of research-based data or a short synopsis of Indiana's workforce landscape and how it link to STEM outcomes for the Introduction section of the plan. Council members are invited to write a synopsis of state data.
- We will be adding case studies/good examples (in call-out boxes) of
 - Public-private partnerships around STEM in the state
 - Interagency/government collaboration around STEM programming
 - School-based examples of excellent STEM implementation and programs
 - o In and out of school collaborations with state organizations

Immediate Questions and Thoughts

- How will we get there (100%) when so many of our high schools do not even offer physics or calculus?
 - o We are offering ICAP online coursework. That will be helpful to some extent.
- What is meant by "robust partnerships?
 - They can be unique, different from each other, customized to fit the local community.
- It is important to get students STEM instruction but even more important to get them into STEM careers.
- Suggestion: Create an asset map of STEM careers in Indiana. Provide visuals showing STEM opportunities in Indiana.
- Suggestion: Put out a call to teachers to challenge students to think through local challenges and connect to local businesses and agencies to address the challenges.
 - Example: Students saw the need for a sound proof wall
- By the time K-5 students are in careers almost everything will be STEM based.
- Current 7th graders will required to complete Pathways. Pathways and STEM could be aligned.

Working Session Objectives

- Review and discuss the Implementation Roadmap of the Strategic Plan
- Identify Collaborators (whole of systems actors) for each action within the three strategic objectives

Next Steps, Meetings & Deliverables

May 16 I-STEM Network Working Session Public Comment

May 18 Feedback on Strategic Plan 1st Draft STEM Council Review Deadline

June 14-15 Teach to Lead with STEM Theme Summit

June-July Copy-editing and design Plan production

July 11 STEM Council Meeting Final Drafty Reviewed and Discussed

